## ABSTRACT OF THE DISCLOSURE

To provide an image processing system and the like which can correct a distortion in a projected image automatically and adequately, a projector has an area sensor section which senses a sensing region onto which an image is projected and outputs sensing information; a storage section which stores angle correction data in which the ratio of average luminance values for a plurality of different regions in the projection area is associated with derivation coordinates for deriving coordinates of the projection area, and also stores coordinate data indicating the derivation coordinates for the projection area; luminance-distribution analyzing section which refers to the angle correction data based on the sensing information and depending on the luminance distribution in the projection area and corrects the derivation coordinates in the coordinate data, based on the angle correction data; and a distortion correction section which corrects the image signals so that the distortion in the projected image is corrected, based on the coordinate data.